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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/220,434	12/24/1998	YOSHIAKI SHIOTA	P/2850-15	3503

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EXAMINER

TRAN, THIEN D

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 12/27/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

BN

Office Action Summary

Application No.

09/220,434

Applicant(s)

SHIOTA, YOSHIAKI

Examiner

Thien D Tran

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is indefinite because the term "transmission circuit" is not defined.

Claim 2 is rejected because it is dependent to claim 1.

Claim 2 is rejected because there is insufficient antecedent basis for the term "the shift size".

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoner et al (U.S Patent No 6,052,383) in the view of Chao (U.S Patent No 5,278,828).

Regarding claims 1 and 2, Stoner discloses a frame-relay circuit having a frame being written in a memory buffer 7 (fig.1).

Stoner does not disclose that the frame is written from an address shifted from the top of a frame buffer, which is well known in the art for data frame organization in the buffer.

Chao, for example, discloses a cell (frame) being written in the memory pool 30 starting from the corresponding address in idle queue 34. In other words, the cell is written from an address shift from the top of a frame buffer (fig.8, line 50-65). Therefore it would have been obvious to one having ordinary skill in the art to use the circuit of Stoner the cell (frame) storing the feature of Chao into it, so that received frames are stored in an organized manner in the buffer, and further improving the speed of the buffer.

Regarding claims 3, 6 and 9, Stoner discloses a frame-relay frame transmission circuit for reassembling a frame-relay frame into an asynchronous transfer mode cell comprising:

- a Lan interface 18 (frame receiver) for receiving a frame through connection (fig.1);

- a memory 7 for storing a receiving frame in a frame buffer (fig.1);

- a SAR 34 for reassembling frame into ATM cell (fig.2A).

Stoner does not disclose a processor for determining a shift size for each connection, which is well known in the art for writing the received cell into the memory at corrected location.

Chao, for example, discloses an address distributor (processor) for determining the idle address (shift size) that being used for written a cell (frame) into the cell pool. Therefore, it would have been obvious to one having ordinary skill in the art to have a circuit of Stoner adding a processor of Chao's system for determining a shift size for each connection so that the received cell is written into the memory at the corrected location in the memory, and further accessing to the buffer easier (fig.8).

Regarding claims 4, 7 and 10, Stoner discloses a storing of address and path identification (DLCI) for read and writes into the memory. See Col.6, lines 55 to Col.7 line 25.

Regarding claims 5, 8 and 11, Stoner discloses a received frame is transmitted to direct memory access. See col.4 line 65.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Murakami et al (US Patent No. 5,768,274) discloses Cell multiplexer having cell delineation.

-Horton (US Patent No. 6,128,300) discloses Line card with modem interface.

-Von Ahnen et al (US Patent No. 6,205,152 B1) discloses Frame relay-to-ATM interface circuit and method of operation.

-Timbs (US Patent No. 5,878,045) discloses Method and apparatus for converting data stream in a cell based communication system.

5. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (703) 306-5445. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (703) 305-4744. Any inquiry of a general

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nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thien Tran

A handwritten signature in cursive script, appearing to read "Alpus H. Hsu".

**ALPUS H. HSU
PRIMARY EXAMINER**